



A.D. 1867, 20th NOVEMBER. N° 3289.

S P E C I F I C A T I O N

OF

JOSEPH STAINCLIFFE.

SMOKE-CONSUMING APPARATUS.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
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Price 4d.

1868.



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Smoke-consuming Apparatus.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Joseph Staincliffe at the Office of the Commissioners of Patents, with his Petition, on the 20th November 1867.

I, JOSEPH STAINCLIFFE, of Lane Ends, near Keighley, in the County of
5 York, do hereby declare the nature of the said Invention for “IMPROVEMENTS
IN SMOKE-CONSUMING APPARATUS, PARTS OF WHICH IMPROVEMENTS ARE APPLICABLE
TO OTHER PURPOSES,” to be as follows:—

My Invention has for its chief object the consumption of smoke by, in the first
instance, withdrawing the gases contained in the furnace flue and afterwards
10 returning the same to the furnace in a state of combustion more or less.
This result I effect (taking, for example, an ordinary flued boiler) by placing
a chamber or box at the chimney end of the flue and within it I place a fan
of ordinary construction; this fan absorbs as before named the gases within
the flue, the firing end of which is closed to the outer air. The gases
15 collected by the fan are conveyed in a suitable pipe to the under side of the
fire-bars and there forced up through the same, the result being that such
gases are thoroughly consumed. It will thus be seen that the gases contained
in the flue are, so to speak, continually re-used, a small supply only of the outer
air being admitted at discretion at the furnace door. If preferred the fan
20 may be placed at the top or side of the boiler, communication being stil

Staincliffe's Improvements in Smoke-consuming Apparatus.

maintained with the flue as before; when however it is placed in the box or chamber before alluded to, to prevent its axis being injuriously affected by the heat, I cause it to rotate in necks composed of small steel balls.

This part of my Invention is applicable to other purposes.

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